

Claims

1. Branched polymer, characterised in that it is derived from the following mixture of monomers:
 - 5 (A) 50 to 93 wt.% of at least one ethylenically unsaturated monomer,
 - (B) 2 to 25 wt.% of at least one ethylenically unsaturated macromonomer with a molecular weight of 1,000 to 20,000 and
 - 10 (C) 5 to 25 wt.% of at least one polymerisable imidazole derivative,wherein components (A), (B) and (C) together make up 100 wt.%, the polymer possesses a molecular weight of 15,000 to 100,000 and is optionally present in the
15 form of a salt.
2. Branched polymer according to claim 1, wherein component (B) is present in a quantity of 5 to 15 wt.% and component (C) in a quantity of 10 to 20 wt.%.
20
3. Branched polymer according to one or more of claims 1 and 2, wherein the molecular weight of the polymer is 25,000 to 75,000, preferably 30,000 to 50,000.
- 25 4. Branched polymer according to one or more of claims 1 to 3, wherein component (A) is optionally a hydroxyalkyl or an alkyl polyalkylene glycol acrylate or methacrylate, a styrene or derivative thereof or a vinyl ether and component (B) is a poly(meth)acrylate
30 with terminal (meth)acrylic function or a monovinyl-terminated polydimethylsiloxane and component (C) is N-vinylimidazole.

5. Branched polymer according to one or more of claims 1 to 4, wherein this is present as a salt of a fatty acid, a hydroxycarboxylic acid, a sulfonic acid, a sulfate, an acidic phosphate or an inorganic acid.
- 5 6. Process for the production of a branched polymer, characterised in that
- (A) 50 to 93 wt.% of at least one ethylenically unsaturated monomer,
- 10 (B) 2 to 25 wt.% of at least one ethylenically unsaturated macromonomer with a molecular weight of 1,000 to 20,000 and
- (C) 5 to 25 wt.% of at least one polymerisable imidazole derivative
- 15 are polymerised by free-radical polymerisation in the presence of an organic solvent and at least one radical initiator, at a temperature of 50 to 180°C, and the polymer thus obtained is optionally converted to its salt.
- 20 7. Process according to claim 6, characterised in that the organic solvent is an ester and the radical initiator is a peroxide or an azo compound.
- 25 8. Process according to one or more of claims 6 and 7, characterised in that the reaction temperature is 90 to 150°C.
- 30 9. Use of the polymers from one or more of claims 1 to 5 as dispersing agents for the production of paints and/or pastes and/or moulding compositions containing pigments and/or fillers, optionally in combination with binders.

10. Use of the polymers from one or more of claims 1 to 5
for the coating of powdered or fibrous solids.
11. Use according to one or more of claims 9 and 10,
5 characterised in that the branched polymer is used in
a quantity of 0.5 to 100 wt.%, based on the solid to
be dispersed.